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Fringe Benefit Programs and Salaries in 49 Colleges and Universities

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VIRTUALLY all major colleges and universities provide fringe benefit programs for their faculties in some measure. To obtain facts on these programs, Columbia's Committee on the Future of the University [1] in the fall of 1956 sent a questionnaire to 50 leading colleges and universities. This questionnaire was one phase of the research program of the committee and was designed to obtain facts on retirement programs, group life insurance, medical benefits, and other programs designed to aid the faculty member in his scholarly pursuits. This article reports the information acquired through the survey.

The institutions included in the survey were selected on the basis of their national or regional academic excellence.[2] Forty-nine institutions replied to the questionnaire. Of these 49, 10 were small private colleges, 18 large private universities, 19 State universities, and 2 institutes of technology.

Thirty-one benefit programs were covered by the questionnaire. These programs and the number of institutions in each category that have them are indicated in the accompanying table. No institution that was surveyed had more than 22 of these programs nor less than 8. Large private universities

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[1] This group will be referred to throughout this article as the committee. The material in this paper is used with its permission.

[2] The conclusions in this article apply only to the 49 institutions that replied to the questionnaire and should not be used as estimates of the fringe-benefit situation in all colleges and universities in the United States. A further limitation of the anlysis is that the committee was not always able to determine the accuracy of the replies. In a number of cases it was difficult to know whether an institution should be placed in "yes" or "no" category. However, unless an institution in its general comments supplied information that contradicted an answer, the answer was accepted as reported.

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generally had more programs than either State universities or small private colleges, although the differences between small colleges and private universities were not great.

MAJOR PROGRAMS

In the institutions surveyed, seven programs were regarded as major: Retirement, Federal old-age and survivors insurance, group life insurance, noninsured medical benefits, insured medical benefits, salary during disability, and group disability insurance.

One institution had all of these programs, 2 institutions had 6½ programs [3] each, and 7 had 6 programs each. One institution had only two of the major programs. Differences between types of institution were not great, although private institutions were somewhat ahead of the State universities.

Retirement Systems

Only one institution does not have an institutionally sponsored retirement system. The others provide retirement benefits through TIAA, CREF (Teachers Insurance and Annuity Association, College Retirement Equities Fund), private insurance plans, university general funds, or State teachers' retirement funds. The insurer most often mentioned was TIAA, including, except in one case, CREF. Roughly 32 of the institutions surveyed provide benefits through these agencies.

The proportion of final salary provided by the program varies among the institutions. In 12 of them the program provides from 30 to 50 percent of the final salary; in 9, approximately 50 percent; and in 8, from 50 to 70 percent. The remaining institutions did not specify a percentage. In 29 institutions the faculty member contributes from 38 to 55 percent of the cost, but in 3 institutions he makes no contribution. In six institutions he pays about one-third. In 11 institutions he contributes from 4 to 7½ percent of his salary, but the contribution of the school was not mentioned.

In five institutions, dependents and/or survivors are not eligible for benefits. The rules of eligibility for retirement programs vary among the institutions, but generally participation is mandatory, often after a waiting period for all full-time employees with rank of instructor or above.

[3] A program was counted as one-half if it was occasional or, if the institution's contribution was deducted from the contribution to the regular retirement program as it is in OASI.

Participation in Old-Age and Survivors Insurance

Forty-one institutions participate in old-age and survivors insurance. Twenty-eight institutions do not reduce their contribution to the regular retirement plan because of participation in this insurance. Thus, these benefits are in addition to the regular program.

Group Life Insurance

Of the institutions surveyed, 38 provide group life insurance for their employees, and 19 of the 38 extend these benefits to retired employees. The maximum amount of insurance carried by an employee ranges from $5,000 to $40,000, and the minimum from $500 to $10,000. Seven institutions have a maximum of $20,000 or more. Benefits for retired employees are typically less, usually by from $1,000 to $1,500.

The rules of eligibility vary, but are similar to those for retirement programs. Full-time service seems to be a fairly general requirement. The proportion of the cost of group life insurance borne by the employee varies; in 15 institutions from 40 to 60 percent of the cost is contributed by the employee.

Medical Benefits

Seven institutions, plus one that offers occasional services, provide medical benefits to employees on a noninsurance basis. Three of these institutions extend such benefits to wives, widows, or children, and three more give occasional benefits to dependents in the form of first aid or help in special circumstances. Six institutions provide medical benefits on a non-insured-service basis to retired employees. Generally these benefits are the same as for the active faculty. Most of the non-insured-service benefits, whether for the active faculty, dependents, or retired faculty, are limited to emergency care or to certain routine services.

Of the 7 institutions offering other than occasional service benefits, 3 require no contribution to the cost from the faculty member; 1 charges an annual fee of $26.00; 2 charge him 80 percent of the cost, and 1, 50 percent. The rules of eligibility usually require employee status. Waiting periods were not mentioned in the reports.

Medical benefits on an insurance basis are provided by 46 of the institutions. In 34 institutions these benefits are provided through Blue Cross and Blue Shield. Eight purchase standard insurance plans through commercial insurers or participate in some

local insurance plan. The remaining four institutions have plans representing variations of the Blue Cross-Blue Shield type. The benefits provided by all of these plans are for the most part the standard hospital and/or surgical benefits. Usually there are limits on the amount of the hospital benefit and on length of stay. The amount of the surgical benefit is ordinarily limited by a fee schedule.

Of the 46 institutions having insured medical benefits, 9 also have major medical expense plans designed to protect against large medical bills that might prove to be an economic catastrophe. In 44 institutions benefits are available to dependents. In 35 institutions the faculty member bears the entire cost of the plan; 6 assume from 25 to 50 percent; 2 bear the cost for the employee, but in one of these the employee assumes the cost for his dependents. The remaining institutions did not specify the proportion of the cost borne by the employee. The rules of eligibility were similar to those for retirement and group life insurance plans.

Group Disability Insurance Other than Medical Care Benefits

Only 14 institutions carry group disability insurance (loss of income insurance). Most institutions prefer to deal with the problem of loss of income through sickness or accident on an individual basis, usually by continuing salary payments for a stated period of time.

OTHER PROGRAMS

Other fringe-benefit programs include tuition plans for faculties and their dependents; educational benefits at the nursery, elementary, junior high, and high school levels; help in securing suitable housing; and aids in furthering a scholarly career such as paying for subscriptions to journals, paying travel expenses, arranging for leave, aiding research, and providing adequate working conditions. All of these matters were subjects for inquiry by the committee.

Educational Benefits

At the elementary and secondary levels, tuition exemption plans for children of faculty members were mentioned by 22 institutions. Educational benefits for children from nursery school through high school were rare. Only 5 institutions reported nursery school benefits; only 3 had elementary school benefits; and only 1 provided high school benefits.

At the college level, 32 institutions provide tuition exemption for faculty families. Twenty-one institutions are in the tuition exchange program, an arrangement among certain institutions for tuition remission to children of faculties in all of the member institutions.

Working Facilities

Most institutions provide some help in furthering a scholarly career. The paying of travel expenses to and from meetings is common. Forty-five institutions, plus 3 "occasionals," provided for such expenses, but 15 of these specified that the expenses were paid only in part or on a limited budget. Only 13 institutions, plus 3 "occasionals," paid for individual faculty subscriptions to scholarly magazines. Of the 33 who did not, 7 remarked that they paid for library and departmental subscriptions.

Funds for summer study and travel are provided by 22 institutions and by 7 for occasional or limited assistance. Two institutions give loans but not grants for summer research. In 1 of the 22 schools $1,200 is given to 10 or 12 persons annually. Research leave during the year is granted by virtually all of the institutions surveyed, 37 regularly plus 5 "occasionally." Sabbatical leave is commonly provided, although 14 institutions do not grant it. One of the 14 indicated that instead of a sabbatical, it employed part of the faculty on a 12-month basis, and that under this plan each faculty member was entitled to the eighth quarter on leave with pay. The typical arrangement for sabbaticals is one-half year at full pay and 1 year at half-pay.

Eleven institutions give office space, library privileges, and secretarial and research assistance to retired faculty members. Fifteen others said they did so "subject to available space," "on an individual basis," "rarely," and the like. One of these 15 said it hoped soon to stop the practice entirely. Eight institutions provide office space and library privileges only. Seven schools give only library privileges. One institution provides facilities only for the completion of research in progress at the time of retirement. One school gives assistance only in the form of research grants.

Office space is a problem for most institutions. Thirty-four institutions reported private offices for almost all full and associate professors, and usually for assistant professors also. Almost all of the 34 mentioned some "doubling up," especially in the

lower ranks. The remaining schools have office-space problems of considerable severity. In a few schools apparently most of the faculty members have to share offices. One school among the 34 that had no serious space problems commented that private offices were "very desirable for conference work with students, and for research."

No institution provides private secretaries for faculty members. All schools, however, have secretarial staffs on which the faculty can draw. Paper readers are provided only sparingly, but research assistants are provided in about 35 of the institutions, including occasionals, from funds usually made available through grants or contracts. In two schools provision for paper readers is against educational policy. One of these expressed the opinion that "no man can teach effectively unless he reads his students' work." Thirty-eight schools, including occasionals, provided readers, although most of them specified that readers were for professors with very large lecture courses.

Thirty-nine institutions provide some sort of parking space for faculty members. Eight of these mentioned a fee for the service, usually a nominal $5; one charged $75 a year. Twenty-one of the institutions that provide parking said that it remained a serious problem more or less. Ten institutions do not have parking facilities, though, even of these, six regard it as a "serious problem."

Seventeen schools, not counting 7 occasionals, have emergency loan funds to help faculty members in distress, at moderate interest (5 percent) or no cost. One reported that such funds were designed only for education of children. Of the 32 that do not have loan funds, 6 have faculty credit unions, 6 others make emergency loans by special administrative action, and 2 allow advances.

Living Conditions

Thirty-four institutions, plus 1 occasional, assist faculty members in acquiring a suitable place to live. Twenty-three of these institutions own apartments or homes for income purposes at which no rent concessions are given but at which faculty people are given preference. Two of the 23 provide apartments for the first year or two only. One large university owns 150 units of duplex housing constructed to provide temporary quarters for faculty people while finding permanent housing. Twelve institutions provide apartments to faculty people at reduced rents; the reduction ranges from 10 to 40 percent. Nine of these institutions also provide houses at reduced rents, with the amount of reduction the same as for apartments. Four of these institutions give a 20- to 40-percent reduction. The bases for the housing award vary. "First come, first served" was the principle mentioned by four institutions. Other bases mentioned were seniority, preference to new members, and a point system. Three institutions attempt to provide places first for new faculty members.

Nineteen institutions assist faculty members in buying homes by providing adequate mortgage funds at attractive interest rates. The interest rates range from 2 to 5 percent, and in one institution funds are made available at the prevailing market rate. Two institutions take 5 percent second-mortgage loans only, since first-mortgage loans are available to the faculty through normal channels.

One institution builds houses on its land for rent or sale (at market rates) to faculty members only. One school makes occasional loans to faculty members for housing. In one institution a faculty cooperative handles mortgages, land purchases, and similar matters. One institution has available to its faculty bank-owned apartments for which the faculty has occupancy preference but no rent reduction. Of the 15 institutions that do not give financial help in housing, at least 4 maintain housing offices where lists of local houses and apartments for sale or rent are available.

SALARIES

In addition to questions on fringe benefits, the committee asked for information on faculty salaries at the undergraduate, graduate, and professional levels. The salaries at the graduate level were generally not different from undergraduate salaries. The institutions that reported on professional school salaries indicated a somewhat higher scale than that found for other faculty members.

Differences in salary practices on a 9-month basis among small private colleges, large private universities, and State universities are not great. State schools tend to have lower minimums for full professors and associate professors than private schools but higher minimums for assistant professors. Large private universities tend to have higher maximums for full professors but lower maximums for associate and assistant professors. The lowest

Fringe benefits in 49 colleges and universities as of 1956

Name of program	Number having programs				
	10 small private colleges	18 large private universities	19 State universities	2 Technological institutes	49 Institutions Total
MAJOR PROGRAMS—*Percentage Score* [1]	(70.0)	(73.4)	(62.8)	(67.9)	(68.4)
Retirement program	10	18	18	2	48
Federal old-age and survivors insurance:					
Institution contribution added to regular retirement	10	8	9	1	28
Institution contribution deducted from regular retirement	0	9	3	1	13
Group life insurance	7	18	11	2	38
Medical benefits, not insured	2	3	2	0	7
Medical benefits, insured	9	18	17	2	46
Salary during disability	9	18	18	2	47
Group disability insurance	2	5	7	0	14
OTHER PROGRAMS—*Percentage Score* [1]	(47.1)	(51.3)	(37.0)	(39.6)	(44.4)
Tuition Exchange, Inc	9	11	0	1	21
Tuition exemption, faculty	4	12	5	1	22
Tuition exemption, families	10	17	3	2	32
Nursery school benefits	0	5	0	0	5
Elementary school benefits	0	3	0	0	3
High school benefits	0	1	0	0	1
Place to live	10	12	11	1	34
Travel expenses to meetings	10	16	17	2	45
Subscriptions to journals	3	4	6	0	13
Limited or occasional	1	0	2	0	3
Grants, summer study, and travel	3	10	9	0	22
Limited or occasional	3	2	2	0	7
Loans, summer study and travel	0	2	1	0	3
Limited or occasional	1	0	1	0	2
Research leaves	5	15	15	2	37
Limited or occasional	2	1	2	0	5
Money for research and publication	5	12	14	1	32
Limited or occasional	2	1	3	0	6
Sabbatical leaves	10	15	10	0	35
Grants for sabbaticals	5	5	4	0	14
Limited or occasional	0	3	0	0	3
Loans for sabbaticals	0	0	0	0	0
Limited or occasional	1	0	0	0	1
Emergency loans	2	9	5	1	17
Limited or occasional	3	4	0	0	7
Discounts on expensive items	2	10	1	0	13
Limited or occasional	2	0	0	0	2
Individual offices	10	14	8	2	34
Limited or occasional	0	1	5	0	6
Private secretary	0	0	0	0	0
Research assistants	0	6	9	1	16
Limited or occasional	3	7	8	1	19
Paper readers	2	4	4	0	10
Limited or occasional	5	11	11	1	28
Parking facilities	7	12	16	2	37
Limited or occasional	0	1	1	0	2
Services for retired	1	5	7	2	15
Limited or occasional	7	12	9	0	28
Total percentage score [1]—all programs	(52.3)	(56.3)	(42.8)	(45.2)	(49.8)

[1] Percentage score computed by adding full programs plus one-half limited or occasional programs and dividing by possible number of full programs.

maximums are found in small private colleges. Median salaries for full professors are highest (based on the median of the medians) in small private colleges, next highest in large private universities, and lowest in State universities. Median salaries for associate professors are highest in small private colleges, and lowest in State universities. Median salaries are highest for assistant professors in State universities, next highest in large private universities, and lowest in small private colleges.

The maximums, minimums, medians, and arithmetic means for the various ranks and types of institution tend to substantiate other salary studies. The maximum 9-month salary for a full professor ranges from $7,800 in a small private college to an unlimited amount in a large private university. The minimum 9-month salary for a full professor ranges from $5,851 in a State university to $10,000 in a large university. The median salary for a full professor on a 9-month basis ranges from $7,210 in a large private university to $13,000 in a similar type institution.[4] Other ranks receive correspondingly lower salaries. The lowest minimum reported for assistant professors was $4,000.

SUMMARY AND CONCLUSIONS

It is not easy to generalize on the quality and extent of the fringe-benefit programs that have been mentioned. None of them is universal, and considerable variation seems to be the rule. Eight programs, counting occasionals—retirement, OASI, insured medical benefits, salary during disability, travel expenses to meetings, research leave, individual offices, and services for the retired—are had by 40 or more of the institutions surveyed. If occasional programs are not taken into account, the list is reduced to 4—retirement (other than OASI), insured medical benefits, salary during disability, and travel expenses to meetings. However, a mere counting of programs does not give a complete picture. Some programs offer substantial benefits, while others are on a minimal basis. It was difficult to determine to what extent the various institutions provided certain types of fringe benefits, such as parking facilities, paper readers, and individual offices, since "yes" and "no" answers as to these were often qualified. In most institutions there seems to be considerable room for improvement of the extent and quality of the fringe benefits provided.

The salary study suggests that the State universities put the emphasis on relatively high salaries for the lower ranking faculty members in contrast to the emphasis on higher salaries for full professors found in private institutions.[5] It also tends to substantiate the fact that, in spite of recent increases, salaries for university teachers are considerably below income figures for members of other professions requiring similar training and experience.

[4] In this analysis one institution on a 10-month basis was included.

Commissioner Derthick Writes to Colleges and University Presidents Regarding Possible Influenza Epidemic

IN A RECENT LETTER to college and university presidents, United States Commissioner of Education L. G. Derthick called attention to the possibility of an influenza epidemic in the United States during the coming winter. The Commissioner noted that Surgeon General Leroy Burney had indicated the State health department as the key agency in each State through which information from the Public Health Service would be channeled, and urged college administrators to contact these State and local officials with reference to their special problems.

Dr. Derthick advised advance planning relative to the handling of illness among students in dormitories and boarding houses, and expressed the view that college personnel should be involved in any community planning done prior to or during an emergency situation.

Conference on Long-Range Planning for Education

THE TWENTY-SECOND EDUCATIONAL CONFERENCE, sponsored by the Educational Records Bureau and the American Council on Education, will be held in New York City, October 31-November 1, 1957. Among topics to be discussed are educational values, changing values and attitudes on the campus, education beyond the high school, institutional problems in long-range planning, the use of tests in admission to schools and colleges, and planning to insure reading skills of all students.

[5] These statements are subject to the same qualifications noted in footnote 2.

Consideration of 2-Year Colleges in Recent Statewide Studies of Higher Education: Part I

By S. V. MARTORANA*

DEVELOPMENT of 2-year colleges has been suggested by many sources as one answer to the greatly increasing demands for higher education throughout the Nation. The President's Committee on Education Beyond the High School in its second report to the President recommended as follows:

> Recognizing that community colleges are uniquely equipped to meet the particular needs of the individual community and to be responsive to the diverse interests of its citizens, the Committee recommends that communities anticipating substantial growth in student population consider the 2-year college as a possible solution to some of the problems of providing additional educational opportunities.[1]

The Committee, however, followed this recommendation with a further strong suggestion that care be exercised in planning such colleges. The reports of recent statewide studies or surveys of higher education are one source of insight into the character of the planning that has been done and the attention that is being given to the 2-year college idea.

Reports of 27 statewide studies that have been completed since 1950 and that have given some attention to the 2-year colleges were available in the Office of Education and formed the basis for this article. Only the statewide studies that considered the 2-year colleges, whether positively or negatively, are included in this report. The bibliography, which will appear with Part II of this report, lists the 27 studies reviewed. Viewed together, the 27 studies provide a general picture of the status and character of the expectations of the 2-year colleges in higher education.

2-Year Colleges Advocated

Analysis of the 27 studies shows first that the great majority of them generally favor the 2-year college idea and its promise for helping to solve the problems of expanding demands for post-high school education. Twenty of the studies were classified as favoring 2-year colleges by some specific and positive declaration. They include the reports of the following States: Arizona, California (2), Connecticut, Florida (2), Illinois, Kentucky, Maryland, Michigan, Minnesota, Nevada (2), New Jersey, New Mexico, New York, North Carolina (2), Ohio, and Pennsylvania.

The Connecticut report, which contains specific statements apparently supporting the 2-year colleges in principle, suggests a variety of ways for providing them. The Connecticut commission specifically endorses the study of community colleges being made by the Connecticut Association of Public School Superintendents. It also recommends the establishment of more 2-year centers of the University of Connecticut, the exploration by the State board of education and the trustees of the University of Connecticut of the possibility of developing more community college facilities, and the establishment of more State technical institutes under the State board of education.[2] The Kentucky and New Jersey studies exhibit a similar advocacy of the 2-year college idea without indicating a preferred plan for its implementation.

The first Iowa survey and the two Wisconsin surveys were classified as reserving judgment about the 2-year colleges. This was done because, although all three of them included the 2-year college in the data presented, they took no position and made no recommendations about it.

Of the remaining four studies, those for Louisiana and Arkansas are the only ones which were not classified as either being in favor of the 2-year college idea or reserving judgment on the matter. This fact is especially significant since both of the studies were comprehensive analyses of higher education. The Louisiana report is completely silent on the question, its only recommendation on 2-year colleges referring specifically to local situations and to individual 2-year colleges in the State. The Arkansas survey calls

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[1] The President's Committee on Education Beyond the High School, *Second Report to the President*, p. 72. Washington, D. C.: U. S. Government Printing Office, July 1957.

[2] *A Study of the Problems Confronting Higher Education in Connecticut*, a report to the General Assembly by the board of trustees of the University of Connecticut and the State board of education, p. 16–18, January 1957.

attention to the types of programs usually provided by 2-year colleges, but these programs are related to the scope of services being provided by the 4-year colleges and universities, and it makes no recommendations on 2-year colleges other than that a State junior college be closed. Both of the last two studies reported for Iowa deal only with statistical data describing the current status of the junior colleges in the State and, therefore, add no further information to this review.

Reasons for Advocating 2-Year Colleges

The reasons put forth for advocating 2-year colleges are summarized in table 1. The most frequently stated reasons for advocating 2-year colleges are: The need for programs that are terminal with the 2-year college; the need to extend opportunity for higher education by decentralization, thus bringing it geographically closer to the students' homes; the need to have more colleges to meet growing college enrollments; the inability of existing higher institutions to reach, attract, and serve all areas of a State where sizable population concentrations of students are found; and the need to provide the services of a post-high-school institution which is directly responsible to and closely concerned with local community demands for higher education programs.

In essence, the second, third, and fourth of the foregoing reasons all stem from two related considerations: Awareness of the need to democratize educational opportunity beyond the high school for all youth who wish to and can profit by it, and recognition that systems of existing 4-year colleges and universities are not presently accomplishing this objective. However, since the two statements occurred separately so often in the reports, they were tabulated separately for this interpretation.

In view of the recognition of many educational leaders and the President's Committee on Education Beyond the High School that there is imperative need to extend American higher education in its "diversity" and "accessibility," these arguments for 2-year colleges are impressive. Their significance lies in the strong consensus they show that by establishing 2-year collegiate units, both decentralization of location and greater diversification of programs will very likely be achieved.

The relationship that the reason sixth in order of frequency of mention holds to two of those that are tied for seventh place deserves special notice. The three related reasons are: The need to relieve congestion of enrollments at the freshman-sophomore levels of 4-year colleges and universities, the need to screen youth who are not qualified or interested in programs of baccalaureate-degree length in 4-year colleges and universities, and the need to evolve a coordinated system of higher education.

The challenge of developing higher educational systems to meet growing enrollments in the States has given rise to an increase in statewide studies and planning and apparently afforded State leaders an opportunity to see the interrelationships of higher institutions. As a result, the States seem to expect more efficiency of operation and complementary support in program offerings of the different types of institutions. Though institutions, both 2- and 4-year, may differ in character and purpose, the State studies are displaying clearly that these variations must not result in unjustified duplication of efforts or waste of resources.

Table 1.—Reasons for supporting 2-year colleges found in 19 statewide studies of higher education

Reason	Number of studies citing reason
Need of State for 2-year terminal-occupational programs	19
Need of State to extend opportunity for post-high-school study to more youth by decentralizing locations of colleges	16
Help State meet problem of expanding college enrollments and demand for post-high-school education	16
Recognition that existing 4-year colleges and universities do not serve all areas in State that need higher education programs	13
Direct responsiveness of 2-year colleges to local community needs	11
Need to relieve congestion of enrollments in freshman and sophomore years in existing 4-year colleges and universities	9
Need to evolve a coordinated system of higher education	7
Recognition that 2-year colleges can effectively screen youth not qualified or interested in further higher education	7
Recognition that 2-year colleges reduce costs of higher education to student and his family	7
Recognition that 2-year colleges reduce costs to State of providing lower-division collegiate instruction	2
Recognition that 2-year colleges will attract more able high-school graduates to carry on their education	2
Recognition that 2-year colleges emphasize teaching and use of instructors trained in teaching rather than research work	2
Need to include all grade levels of education that involve the adolescent years in secondary school units	1

2-Year College Programs Suggested

Nineteen of the survey reports which support 2-year colleges made some statements about the scope of programs that these colleges should offer. They are shown in table 2. All 19 propose that the curriculum should include general liberal education at the lower division collegiate level. The University of Nevada report suggests that the programs to be offered by its 2-year branch at Las Vegas be determined on a "selected" basis. The studies contain equally strong support for the offering of organized occupational programs leading to employment right after 2-year college study. Seventeen support the offering of preprofessional courses at the lower division collegiate level and cite this offering as distinct from that of general liberal education in the same years. It seems apparent from the phraseology of the other two (Arizona and Connecticut) that the function of preprofessional education is thought to be achieved by general liberal education, though no specific statement to this effect is made.

From the point of agreement on offerings of freshman and sophomore courses in general education, the arts and sciences, and organized occupational studies, a noticeable decrease in unanimity of view is observed. Only 14 of the 19 studies specifically include the offering of community service or adult education courses as a responsibility of the 2-year colleges. However, only one, the recent report on the University of Nevada, specifically assigns this function to another agency. In this case, the recommendation is that "short courses, extension classes, and inservice training programs . . . which would draw on the resources of the entire university system, the Reno as well as the Las Vegas faculty, would be coordinated by the Statewide Development Office." [3]

Only 10 studies make the 2-year colleges specifically responsible for student guidance services. However, here again failure to include this function may be an oversight resulting from an assumption that any college of comprehensive scope would have such student personnel services. Nonetheless, a tabulation of frequency of mention was made because the guidance and screening function of 2-year colleges is one of the most frequently cited by workers in the 2-year colleges as an especially appropriate service for these institutions to provide.

Criteria for Establishment

Few of the studies reviewed formulated statements of criteria for establishing 2-year colleges. Those that did are shown in table 3. In many instances, statements which could be interpreted as criteria to be met before a 2-year unit could be established were stated in broad, general terms that would be difficult for a locality to apply. An illustration of this is seen in the Connecticut report which states that before a new technical institute

[3] Nevada Legislative Council Bureau, *The University of Nevada: An Appraisal*, Bulletin No. 28, p. 166. Carson City, Nev.: Nevada Legislative Council Bureau, December 1956.

Table 2.—Scope of offerings suggested for 2-year colleges by 19 statewide studies of higher education

Type of offerings	Arizona	California (1955)	California (1956)	Connecticut [1]	Florida (1955)	Florida (1957)	Illinois	Kentucky	Maryland	Michigan	Minnesota	Nevada (1957)	New Jersey	New Mexico	New York	North Carolina (1953)	North Carolina (1955)	Ohio	Pennsylvania
General-liberal education at freshman-sophomore level	x	x	x	x	x	x	x	x	x	x	x	(x[2])	x	x	x	x	x	x	x
Preprofessional courses	----	x	x	----	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Organized occupational (2 years or less)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Adult education and/or community service courses	----	x	x	----	x	x	x	x	----	x	x	(x[3])	x	x	x	x	x	x	----
Student guidance and personnel services	----	x	x	----	x	x	x	----	(x[4])	x	x	----	----	x	x	----	----	x	----

[1] Report suggests that University offcampus centers will concentrate on general-liberal education and technical institutes will concentrate on organized occupational programs. No suggestion is made on other types of 2-year colleges being studied in Connecticut.

[2] Terminology in report suggests that offerings ought to be extended on a "selected" basis.

[3] Offerings in this area would be coordinated by the Statewide Development Office of the University of Nevada at Reno.

[4] Recommends strong guidance and student-personnel services in all higher institutions.

Table 3.—Criteria for establishing 2-year colleges stated in 10 statewide studies of higher education*

[x is used when no specific figures were reported]

Criterion	Calif. (1957)	Conn.	Fla. (1957)	Ill.	Mich.	N. Mex.	N. C. (1953)	Pa.
Potential enrollment of a minimum number of equivalent full-time students.	400	[1] x	400 [2] or 200	200 [3]	200	200	300	
High school enrollment of at least 800 students in grades 9–12 in district.				x [4]	[5] x	x	[6] 750	
Population of 1,200 persons aged 18–19 in county					[5] x			
Population of 2,000 persons aged 19–21 in county					[5] x			
Proposed 2-year college beyond commuting distance of existing higher institutions offering programs needed in locality of 2-year college.	x	x		x [7]	[7] x	[7] x		x
Adequate tax base or evidence of financial support for minimum financing per student.	$100 million			$450 per student.			x	x
A local survey of needs for 2-year college							x	x
Evidence of need based on analysis of socio-economic characteristics of local population.				x				
Evidence of local initiative to create college							x	
Adequate facilities for both day and evening programs.							x	
Minimum service area of 1 county or 30-mile radius.			x					
High growth potential if low in projected enrollment.			x					
Full public discussion in locality		x						

*In addition to the 8 reports cited in the columns of the table, the following made general statements of criteria:

Kentucky—Ashland and Paducah are cities of size and resources adequate for developing outstanding community colleges.

Ohio—Uses as illustrations of logical centers for new 2-year colleges localities that range in population from 15,000 to 25,000 people.

[1] The report states "a significant number."

[2] 400 for Priority I and II localities, 200 for Priority III localities.

[3] Present law requires 100 students; study considers localities that meet the legal minimum of 100 and the "desirable" minimum of 200.

[4] Also makes projections of 2-year college enrollment based on the gross population in the county and total school enrollment (grades 1–12) in district.

[5] Observation of any one of these measures was found to give reliable indication of potential of 200 full-time students in 2-year college.

[6] 750 students in grades 9–12 in high schools within 25-mile radius.

[7] Criterion used only for allocation of some areas to a second order of priority or consideration.

can be begun by the State board of education or a new center created by the board of trustees of the University of Connecticut, each "must be convinced that a significant number of prospective students in that locality are unable to secure education . . . from resources already available in the community . . ." [4]

The most frequent criterion mentioned is assurance that a specific minimum number of students would be enrolled in the 2-year college. The recommendations on this number range from 200 regular day students (Florida for Priority III localities, Illinois, Michigan, and New Mexico) to 400 (California, and Florida for Priority I and II localities). Many of the criteria are based on the measures of school population or gross population which have been found effective in predicting the enrollment of regular day students in the 2-year college. For example, the Illinois, Michigan, and New Mexico studies employed a base figure of 800 students enrolled in grades 9 through 12 in the district of the proposed 2-year college. The Michigan community college survey complemented this measure by use of two other measures of base population statistics: a population of at least 1,200 persons aged 18 and 19 in the county, or a population of at least 2,000 persons between the ages of 19 and 21 in the county. The Illinois survey also made projections of potential enrollments based on total school enrollment in grades 1–12 and on gross population in the county.

Next most frequent requirement is that the students who would be served by a new 2-year college reside beyond commuting distance of existing higher educational institutions or that the services of existing higher institutions do not meet their needs. However, relatively few reports required local surveys (beyond the prediction of a potential minimum enrollment) as a prerequisite for establishing a college. In practice, however, State agencies which administer 2-year colleges generally require such surveys for determination of the locality's position in order of priority for action and for clarification of specific questions about the programs that the new institutions should offer.

[4] *A Study of the Problems Confronting Higher Education in Connecticut*, pp. 15 and 16.

A question that often arises when criteria for establishing new 2-year colleges are discussed is: What is the minimum tax base or other measure of financial strength that should be required before a new institution is approved? Only four of the State studies reviewed considered this issue, and two of them merely described as a general principle the requirement that reasonable evidence of financial ability to support a 2-year college program should be shown before final action is approved. A difficulty is sometimes encountered when attempt is made to hold to a recommended, fixed minimum figure of assessed valuation, as is illustrated in the second California report. It recommends:

> . . . that a minimum of 400 full time students and a tax base of approximately $100 million ordinarily are reasonable criteria for use in determining establishment of a new junior college. In some cases, isolation of students from other public higher education facilities may have been the principal justification for small junior colleges . . . . Improved transportation and dormitory facilities may alleviate the need for establishing many additional small institutions in the future.[5]

However, when detailed analysis of need was made of several areas in the State, 14 new junior college districts were proposed; 4 of these districts are below the stated desirable minimum criteria; 2 are below minimum levels in both projected enrollment and assessed valuation, 1 fails to reach the enrollment figure, and another the desired assessed valuation. This observation is not a criticism of the planning in California. Rather, it is a recognition of its flexibility of planning, noting that hard-and-fast rules developed on a statewide basis are often inappropriate when local situations are under study. Other States may profit by such demonstrated flexibility in California where the 2-year college movement has advanced to a stage farther than in any other and where, as a result, most rigid criteria for establishing new 2-year colleges might be expected.

In general, the sketchy and diverse character of the criteria which appear in the State study reports suggests that this is an area needing considerable additional study. To some extent, the vagueness of the State studies on this point is to be expected because most of them were aimed at identifying the problems of higher education in the States and for proposing general approaches to their solution. States like California, Florida, Illinois, Michigan, and New York which have carried on their studies to relatively advanced stages show in their statements of criteria the results of more specific research into the concrete development of 2-year colleges as one answer to the problems of higher education. As other States undertake similar advance planning and translate broad policies into concrete action, they will very likely also sharpen criteria for establishing new 2-year colleges.

EDITOR'S NOTE.—*The concluding part of this article will be published in an early issue of* HIGHER EDUCATION. *Remaining topics to be discussed include State and local control of 2-year colleges, their financing, and machinery for their coordination. There will also be included in the final installment a summary of the entire study and a bibliography of the 27 studies used.*

[5] *A Study of the Need for Additional Centers of Public Higher Education in California*, p. 38. Sacramento: California State Department of Education, 1957.

Delaware Enacts "Right to Education" Law

A DELAWARE LAW, effective July 1957, provides a source of financial assistance to any student of the State who is eligible to attend the State university but who lacks sufficient money to do so.

It specifically states that no discrimination shall be made in the application of the act on the basis of field of study, place of residence, or sex, and that as long as money is available to meet the needs of all qualified students, no preference shall be given to one student over another because of superior academic accomplishment.

The legislature set aside $30,000 to put the bill into effect for the first fiscal year, and $57,000 for the second fiscal year beginning July 1, 1958. The individual grants provided for are not for any fixed amount per student, but will be made available to qualified students on a basis of economic need. Each applicant for aid will provide biographical information, a financial budget, and parents' financial statement.

While applicants must have as preparation for admission the regular academic, college preparatory high school program, the only grade requirement for admission is the certifying grade of the student's high school and the high school recommendation. Once accepted, students must maintain at least a C— average to retain their scholarship.

Teaching of Religion at State Colleges and Universities

THE PROPOSAL by the chaplains that formal courses in religion of a sectarian nature be offered at the University of Rhode Island prompted Carl R. Woodward, president of that institution, to make a survey of instruction in religion at other State colleges and universities. Responses were received from 51 of the 59 State universities and 15 of the 19 separate land-grant colleges included in the survey.

All the institutions which replied indicated that they offered courses in religion, either in religion as such or in subjects related to religion. Twenty-seven institutions reported separate departments or schools of religion. In the remainder of the institutions giving instruction in religion, the courses were offered by other departments.

Overwhelmingly the instruction is given on a nonsectarian* basis, and for academic credit. The replies indicate that at three State universities sectarian courses are given in addition to the usual nonsectarian courses, each under special circumstances. At the State University of Iowa, sectarian courses are given in the School of Religion, which is separately incorporated but is academically an integral part of the university. At the University of North Dakota the courses are offered by separate church foundations. At the University of Massachusetts, sectarian courses are given *at* the university, not *by* it, and no credit is allowed.

There is no standard pattern of faculty participation. At 52 of the institutions, the great majority of the courses in religion are given by regular members of the faculty, generally laymen, but occasionally clergymen. At 11 institutions, the courses are given by the local college or university chaplains, and at 9 they are offered by visiting lecturers. At some of these institutions, more than one of these groups is represented. In 52 of the institutions, the instructors are paid by the administration. At 6 of these institutions, outside sources also contribute to the cost of instruction, and at 10 others the instructors receive their full compensation from outside agencies.

Special arrangements with an outside agency (professional school or foundation) for which transfer credit in religion is allowed, was reported by 13 institutions. Credit for nonsectarian courses in religion is normally accepted for transfer among accredited colleges and universities on the same basis as credits in other academic fields; that is, according to the criteria of the institution concerned. Generally, transfer credit is allowed only for nonsectarian courses, and the number of such credits accepted is limited.

Dr. Woodward found that there was a growing consciousness of the importance of religion in the instructional programs of our State colleges and universities. However, the emphasis varies widely among different institutions. In some institutions, which have separate departments of religion, the focus is on courses in religion as a distinct subject of study. In others, particularly those that do not have separate departments of religion, the approach is largely through other disciplines, mainly philosophy, but also to a considerable degree through English, history, and sociology; for example, courses in the philosophy of religion, the history of religion, and Biblical literature.

*In the classification of courses as "sectarian" and "nonsectarian," the commonly accepted distinction was followed: A course which places particular emphasis on the doctrine of a specific religious denomination, usually taught by a clergyman of that denomination, is regarded as "sectarian." Courses dealing with religion in any or all of its aspects quite objectively without any doctrinal emphasis or denominational preference are regarded as "nonsectarian."

General Motors Scholarships

HIGH SCHOOL SENIORS have been invited to compete for more than 400 General Motors 4-year college scholarships under a $5 million a year program of support to higher education.

The scholarships are awarded under two plans. Three hundred are awarded under the College Plan directly by 178 public and private colleges. More than 100 under the National Plan are awarded through competitive examinations given each year. Awards range from $200 to $2,000 a year, depending on the student's need. The average award during the first 2 years of the program was $949 annually. In addition, private colleges selected by winners are assisted with grants in aid of $500 to $800 a year for each scholarship student in attendance.

There now are some 1,200 college students attending college with General Motors scholarships. About 70 percent plan careers in engineering and the sciences, although there are no restrictions on courses of study. When the program is fully under way, more than 1,600 students will be attending college each year under its provisions.

College Construction Rate Doubles in Five Years

By W. ROBERT BOKELMAN*

COLLEGES AND UNIVERSITIES with slightly more than 90 percent of the Nation's higher education enrollment expect to invest more than $3.6 billion in the construction of physical facilities during the 5-year period, 1956–60, which is double the amount they spent during the 5-year period, 1951–55. These facts were revealed in the Office of Education's study of college and university facilities. A complete report of this survey will be available later in the year.[1]

While returns were received from 72 percent (1,368 of 1,891) of the colleges and universities to whom questionnaires were distributed, the 90 percent enrollment coverage indicates that the nonrespondents for the most part were smaller institutions. In a comparison of the returns by types of institutions, junior colleges were lowest in percent of response with 47 percent (243 of 512); universities were highest with 98 percent (150 of 153). By types of control, enrollment represented in this study was 90 percent for public institutions and 91 percent for private institutions. By geographic regions, the enrollment included was: West, 78 percent; South, 89 percent; and North Central and Northeast, each 95 percent.

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[1] The comprehensive report will consist of three parts: (1) A status report of planning activities at the institutional level, (2) construction completed 1951–55, and (3) construction planned 1956–70.

1951–55 Expenditures Compared With 1956–60 Projections

A comparison of the actual 1951–55 expenditures with the projected 1956–60 expenditures—by type of control and by geographic region—is shown in table 1. While the total anticipated expenditures in each geographic region indicate an increase in 1956–60 over the actual expenditures in 1951–55, the total planned expenditures of the South account for only 22.6 percent of the 1956–60 total, a decrease from 28.0 percent in 1951–55. The decrease in the South results from a relatively lower rate of planned expenditures by the public institutions.

Table 1.—Actual expenditures for higher education facilities, 1951–55, and estimates for 1956–60, by type of control and by geographic regions

[Cost figures are in thousands of dollars]

Geographic regions	Public and private				Public				Private			
	1951–55		1956–60		1951–55		1956–60		1951–55		1956–60	
	Percent	Cost	Percent	Cost	Percent	Cost	Percent	Cost	Percent	Cost	Percent	Cost
Aggregate United States	**100.0**	**$1,791,403**	**100.0**	**$3,620,717**	**100.0**	**$1,103,408**	**100.0**	**$2,288,774**	**100.0**	**$687,995**	**100.0**	**$1,331,943**
Northeast	25.0	447,172	26.7	965,630	11.0	121,759	15.7	359,826	47.3	325,413	45.5	605,804
North Central	27.7	496,909	29.7	1,073,901	31.2	343,765	33.0	755,197	22.3	153,144	23.9	318,704
South	28.0	501,909	22.6	819,944	32.0	352,697	23.2	531,546	21.7	149,212	21.6	288,398
West	18.2	325,599	17.3	624,884	24.1	265,925	22.2	508,077	8.7	59,674	8.8	116,807
Outlying parts of the United States	.4	6,643	.5	20,372	.5	6,091	.8	18,142	------	552	.2	2,230
United States service academies	.7	13,171	3.2	115,986	1.2	13,171	5.1	115,986	------	------	------	------

Table 2.—Number and cost of buildings completed by higher educational institutions, 1951–55, and projected, 1956–60, by type of control and by function of buildings

[Cost figures are in thousands of dollars]

Buildings classified by function	Public and private				Public		Private	
	1951–55		1956–60		1951–55	1956–60	1951–55	1956–60
	Number	Cost	Number	Cost	Cost	Cost	Cost	Cost
AGGREGATE UNITED STATES	**3,272**	**$1,791,403**	**4,367**	**$3,620,717**	**$1,103,408**	**$2,288,774**	**$687,995**	**$1,331,943**
Total instructional	**1,189**	**812,370**	**1,859**	**1,763,940**	**576,257**	**1,202,900**	**236,113**	**561,040**
1. Educational laboratory	40	21,978	58	36,062	19,150	32,694	2,828	3,368
2. Fieldhouse	32	22,690	44	36,587	15,115	26,073	7,575	10,514
3. Gymnasium	98	60,368	198	141,607	38,208	102,148	22,160	39,459
4. Home management laboratory house	18	872	26	4,900	733	3,614	139	1,286
5. Instructional (classrooms)	490	347,361	808	910,860	252,026	594,979	95,335	315,881
6. Library	176	103,908	283	222,983	63,270	125,427	40,638	97,556
7. Museum	9	4,204	9	4,145	997	1,885	3,207	2,260
8. Instructional laboratories	228	121,135	308	241,389	75,472	185,188	45,663	56,201
9. Swimming pool	19	3,693	23	4,569	3,120	2,527	573	2,042
10. Teaching hospital	25	114,495	33	112,608	99,351	87,851	15,144	24,757
11. Other instructional	54	11,666	69	48,230	8,815	40,514	2,851	7,716
Total research	**193**	**107,934**	**173**	**144,600**	**59,897**	**85,043**	**48,037**	**59,557**
1. Agriculture	83	15,469	51	32,465	15,158	28,315	311	4,150
2. Astronomy	4	2,575.	6	2,596	2,465	740	110	1,856
3. Biological	13	7,543	15	10,652	1,486	5,104	6,057	5,548
4. Chemistry	6	3,010	14	12,633	2,347	5,108	663	7,525
5. Mathematics and statistics	3	797	3	2,950	92	2,950	705	----------
6. Physics	11	8,514	20	16,232	2,088	7,753	6,426	8,479
7. Other physical sciences	17	7,299	15	14,909	3,191	10,386	4,108	4,523
8. Social sciences	2	589	----------	----------	188	----------	401	----------
9. Dentistry	4	1,271	2	550	907	----------	364	550
10. Engineering	15	14,153	20	17,015	11,147	6,265	3,006	10,750
11. Medicine	35	46,714	27	34,598	20,828	18,422	25,886	16,176
Total residential	**1,031**	**485,863**	**1,378**	**1,130,103**	**261,123**	**668,281**	**224,740**	**461,822**
1. Faculty apartments	53	10,421	52	21,805	5,797	7,672	4,624	14,133
2. Faculty and staff houses	113	7,613	40	12,260	2,326	6,307	5,287	5,953
3. Fraternity and sorority houses	33	5,679	12	5,157	4,365	3,000	1,314	2,157
4. Hotel-type accommodations	10	5,701	7	9,456	3,075	6,943	2,626	2,513
5. Apartments for married students	51	22,086	115	122,747	13,185	94,280	8,901	28,467
6. Men's residence hall	390	244,317	577	533,577	123,840	317,284	120,477	216,293
7. Women's residence hall	349	187,148	562	423,713	106,632	232,474	80,516	191,239
8. Other residential	32	2,898	13	1,388	1,903	321	995	1,067
Total general	**859**	**385,236**	**957**	**582,074**	**206,131**	**332,550**	**179,105**	**249,524**
1. Administration building	45	17,047	99	66,554	9,526	37,599	7,521	28,955
2. Armory	12	1,039	22	14,978	626	12,828	413	2,150
3. Auditorium	28	16,086	73	67,112	8,003	30,037	8,083	37,075
4. Chapel	43	16,133	58	28,212	1,386	4,206	14,747	24,006
5. College union	140	92,278	220	197,611	59,521	111,393	32,757	86,218
6. Faculty club and facilities	3	606	4	1,415	100	450	506	965
7. Hospital (nonteaching)	6	9,746	5	22,649	71	7,649	9,675	15,000
8. Infirmary (student health)	43	9,040	50	15,266	6,029	11,879	3,011	3,387
9. Office building	8	876	10	7,044	515	3,974	361	3,070
10. Stadium	26	7,205	18	12,675	6,807	11,174	398	1,501
11. Power and heating plant	77	40,293	64	31,611	28,117	26,497	12,176	5,114
12. Food facilities	56	18,702	144	65,142	8,488	39,329	10,214	25,813
13. Multipurpose	138	124,709	18	10,367	53,330	5,715	71,379	4,652
14. Auxiliary enterprises	38	5,091	30	4,704	4,042	3,234	1,049	1,470
15. Other general	196	26,385	142	36,734	19,570	26,586	6,815	10,148

Another significant change is noted in the Northeast, where public institutions will account for 15.7 percent of the 1956–60 expenditures, a gain over the 11.0 percent of 1951–55. The predominance of private institutions in the Northeast can be seen from the 1951–55 expenditures in which it accounts for 47.3 percent of the total private expenditures in the United States and the 1956–60 anticipated expenditures in which it accounts for 45.5 percent of the total private expenditures in the United States.

Types of Buildings Planned

A more detailed comparison of 1951–55 actual building expenditures with 1956–60 anticipated expenditures appears in table 2. This table includes an analysis by function, number of buildings, and cost. Compared by functions, a larger percentage of public and private expenditures will be made for instructional and residential facilities and a smaller percentage will be made for research and general buildings in 1956–60 than in 1951–55. Instructional and residential facilities combined will increase from 72.5 percent of total construction during 1951–55 to 80.0 percent of total construction projected for 1956–60. On the other hand, research and general facilities combined will decrease from 27.5 percent of total construction during 1951–55 to 20.0 percent of total construction projected for 1956–60. An item of interest is the increased expenditures planned for apartments for married students. In 1951–55, 4.5 percent of total residential expenditures were for such apartments; in 1956–60, 10.9 percent of total residential expenditures is planned for this type of facility.

Other types of buildings projected to more than double their 1951–55 volume of construction in 1956–60 are: Gymnasiums, home management laboratory houses, instructional (classroom) buildings, faculty apartments, men's residence halls, women's residence halls, administration buildings, armories, auditoriums, college unions, faculty clubs, nonteaching hospitals, office buildings, and food facility buildings (dining rooms and kitchens).

Tables are not included that give details on the following items, but they seem to be of sufficient interest to be included in this report. Excluding the United States service academies and institutions in outlying parts of the United States, planned dormitories will average 241 gross square feet for each occupant at an average cost for each student occupant of $4,150. The gross space to be provided and the projected cost will range from 222 square feet and $3,281 in the South to 256 square feet and $4,955 in the Northeast.

Of their total planned construction, the respondents indicated that 77.1 percent of the total would be expended for new buildings (not replacement or rehabilitation of existing buildings), 13.3 percent on the rehabilitation or replacement of existing buildings, and 9.6 percent on rehabilitation and additional combinations. Private institutions will place more emphasis on the replacement and rehabilitation of existing buildings than will public institutions. Private institutions will make 31.5 percent of their construction expenditures on rehabilitation or replacement and rehabilitation-addition expenditures, while public institutions will make 18.2 percent of their construction expenditures on this type of construction.

Extent of Air Conditioning Projected

There is much interest in air conditioning educational facilities. While no base line exists for noting the significance of any changes in the number of educational buildings air conditioned, this study indicates that 1 of 4 buildings planned will have some percent of its space air conditioned and that 1 of 7 buildings will be from 75 to 100 percent air conditioned. As one would expect, the South leads the other geographic regions in planned air conditioning, followed in order by the Northeast, North Central, and West. Slightly less than 2 of 5 buildings in the South will have some percent of its space air conditioned, and 1 of 4 buildings planned will be from 75 to 100 percent air conditioned.

Hampton Institute Program in Virgin Islands

This past summer marked the fourth session of the Virgin Islands Experimental College conducted under the sponsorship of Hampton Institute, Hampton, Va. The session, held on the island of St. Croix, was a part of a larger program to improve the quality of public school teaching in the Virgin Islands. The program includes inservice training during the school term and training at Hampton Institute of a selected number of Virgin Islands students for work in the islands' public schools following graduation.

New Directory of Financial Assistance to Graduate Students

IN RESPONSE to the continuous demand for information about student financial aid, the Division of Higher Education of the Office of Education has organized the student assistance project.[1] Its purpose is to study financial aid, both institutional and noninstitutional, undergraduate and graduate.

The first subject selected for investigation under the new project was student financial aid granted by institutions of higher education. At irregular intervals over the past 20 years, the Office has collected information on this subject, the last time in 1950.[2] Soon after questionnaires for a new directory began coming back to the Office, it became clear that, because of the large amount of data available and the high percentage of institutions participating in the study, there should be 2 directories, 1 for graduate and 1 for undergraduate students. The graduate directory, *Financial Aid for College Students: Graduate* (Bulletin 1957, No. 17), recently came off the press.[3] The undergraduate directory,[4] *Financial Aid for College Students: Undergraduate*, (Bulletin 1957, No. 18) was released just as this issue of Higher Education went to press.

Scope

For almost 400 of the 542 institutions which granted graduate degrees in 1955–56, the new directory describes all forms of financial aid to graduate students over which the institutions have control—fellowships, loans, and employment. It also includes data on financial aid controlled by undergraduate schools to be used to send their graduates to graduate schools. Institutions omitted from the directory either reported no financial aid to graduate students or did not participate in the study.

[1] The project is under the general direction of Ralph C. M. Flynt, Director, Higher Education Programs Branch, and J. Harold Goldthorpe, specialist for higher education.

[2] The resulting publication was *Scholarships and Fellowships Available at Institutions of Higher Education*, by Theresa Birch Wilkins. (Bulletin 1951, No. 16, Reprint 1954.) Washington, D. C., U. S. Government Printing Office, 1954.

[3] For bibliographical data on this item, see below, New Publications, Office of Education.

[4] For bibliographical details on this item, see New Publications, Office of Education.

The comparison of coverage between the 1951 and the 1957 publications shows that previously the Office had information about 265 institutions which reported 13,659 fellowships having a total value of $9,266,966. The new directory reports that 330 institutions awarded 24,885 fellowships having a total value of $18,293,150. The average value of these stipends increased from $678 in 1948–50 to $757 in 1955–56. The directory also contains information on 29,406 graduate assistantships and 30,507 loans to graduate students. Since this is the first time that such data have been collected by the Office, these figures cannot be compared with earlier ones.

This directory presents a table showing the amount of graduate student aid granted by the institutions within the various States. The institutions in five States—New York, Massachusetts, Minnesota, Illinois, and California—awarded fellowships valued at over $8.7 million, which is almost 48 percent of the funds awarded.

Types of Financial Assistance

By far the most important financial aid to graduate students was the $35,007,789 paid to 29,406 graduate teaching and research assistants by 248 institutions. In addition, another $6,510,829 was paid to 20,414 graduate students for work not classified as "teaching and research assistants." Over 50 percent of this aid was granted by institutions in 6 States—New York, Illinois, California, Indiana, Michigan, and Pennsylvania.

The figures on employment of graduate students show that institutions in different States have widely different philosophies about aiding graduate students. In general, the private institutions disburse more money for fellowships than for graduate assistantships, while the public institutions follow the opposite practice. In 11 States, most of them east of the Mississippi River, the amount awarded for fellowships was greater than the amount disbursed to graduate assistants. The reasons for the differences and sectional practices between publicly and privately controlled institutions and various sections of

the Nation will be discussed in another publication of the project.[5]

The directory presents data on loans to graduate students in 126 institutions; however, it does not include loans that had to be repaid within 1 year. The information about loans gives the number and amount lent to graduate students, the average rate of interest to students in school and after leaving school, the schedule of repayment, and the maximum amount that a graduate student could borrow when this information was reported.

Data about employment are in two parts, "Teaching and research assistants" and "Other graduate students." The number and average amount paid each group are stated.

Directory Distribution

Copies of the directory have been sent to the college and university libraries and to selected officials of these institutions. Additional copies are available through the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., at 50 cents each.

Personnel Changes in Division of Higher Education

IN SEPTERMBER 1957, D. Grant Morrison joined the Office of Education's Division of Higher Education as specialist for junior colleges. He succeeds S. V. Martorana who recently was appointed the Division's chief for State and regional organization.

The new junior college specialist came fromthe State of Washington where he had been employed since 1948 by the State board of education as director of junior college education. He previously had had extensive experience in teaching and educational administration. A graduate of the University of Washington, he received the M. A. degree from the University of British Columbia in 1930, and the Ed. D. degree from the University of Washington in 1948. Dr. Morrison was born in Canada and served in the Royal Canadian Air Force, 1941–46.

George C. Decker, formerly chief, and John B. Rork, formerly program representative in the Division's educational advisory services, college housing loan program, have received new divisional appointments. Dr. Decker has become chief for campus planning and financial development, and Mr. Rork specialist for college and university facilities.

[5] Student Financial Assistance in Institutions of Higher Education—A Survey, by J. Harold Goldthorpe, which is now being written.

Ball State and Purdue Joint Doctorate

THE BOARD OF TRUSTEES of Purdue University and the State Teachers College Board governing Ball State Teachers College have announced a joint doctor of philosophy degree in education in the area of guidance. Under the cooperative plan, a student would complete a master's degree either at Purdue or Ball State. He would then spend approximately a year taking doctoral-level courses at Ball State before going to the Purdue campus for additional research and study to complete his doctorate. The combined program would require at least six semesters of work beyond the bachelor's degree.

College Attendance Under War Orphans Education Program

MORE THAN 3,000 sons and daughters of deceased war veterans attended class this past school year under the War Orphans Education program according to the Veterans' Administration. Of these students, 94 percent were enrolled in colleges and universities.

It is estimated that there are now 25,000 war orphans who will reach the eligible age for education under this program in 4 years. Another 60,000, now under 14, will become eligible in later years.

Small Colleges Workshop

THE COUNCIL for the Advancement of Small Colleges held a workshop at Milligan College, Tenn., August 10–17, 1957, on the theme, "Advancing Quality Education." Delegates gave attention to ways by which the greatest value may be derived from the Council's testing project; the use of tests in the evaluation of the teacher-learning conditions in member colleges; ways by which the educational programs of the colleges can be further improved; and possibilities for experimentation within each college.

National Commission on Health Careers

FORMATION of a National Commission on Health Careers to plan ways to meet the acute need for qualified health personnel in the United States was recently announced by Basil O'Connor, president of the National Health Council. The Commission will be headed by Leonard A. Scheele, former Surgeon General of the United States Public Health Service.

Mr. O'Connor said that health manpower shortages are already at a "crisis stage" and that they pose the biggest threat not only to our present health services but also to the future progress of medical science. He noted that the great majority of the more than 150 health occupations are "dangerously understaffed."

The Commission will undertake to help meet these manpower shortages through a "total approach" which will include investigation of career opportunities in health fields and attention to educational facilities and programs for potential health workers.

NEW PUBLICATIONS

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From the Office of Education

Current Expenditures Per Pupil in Public School Systems: Small and Medium Sized Cities, 1955–56, by Lester B. Herlihy *and* Joel Williams. Washington, U. S. Government Printing Office, 1957. Paper, 27 p. 25 cents. (Circular No. 501.)

Digest of Annual Reports of State Boards for Vocational Education in the Office of Education, Fiscal Year Ended June 30, 1956. Division of Vocational Education, Washington, U. S. Government Printing Office, 1957. Paper, 45 p.

Faculty in Institutions of Higher Education, by M. Clemens Johnson *and* Leah W. Ramsey. Washington, U. S. Government Printing Office, 1957. Paper, 40 p. 30 cents. (Circular No. 504.)

Financial Aid for College Students: Graduate, by Richard C. Mattingly. Washington, U. S. Government Printing Office, 1957. Paper, 151 p. 50 cents. (Bulletin 1957, No. 17.)

Retention in High Schools in Large Cities, by David Segel *and* Oscar J. Schwarm. Washington, U. S. Government Printing Office, 1957. Paper, 29 p. 20 cents. (Bulletin 1957, No. 15.)

U. S. Government Films for Public Educational Use, by Seerley Reid, Anita Carpenter, *and* Annie Rose Daugherty. Washington, U. S. Government Printing Office, 1957. Paper, 92 p. 35 cents. (Supplement No. 1.)

Financial Aid for College Students: Undergraduate, by Theresa Birch Wilkins, Washington, D. C. U. S. Government Printing Office, 1957. Paper, 219 p. $1. (Bulletin 1957, No. 18.)

Handbook, Office of Education. Washington, D. C. U. S. Government Printing Office, 1957. Paper, 28 p. 15 cents.

Provisions Governing Membership on Local Boards of Education, by Morrill M. Hall. Washington, D. C. U. S. Government Printing Office, 1957. Paper, 37 p. 30 cents. (Bulletin 1957, No. 13.)

Schools of Public Health, by Leonard S. Rosenfeld, *and* Others. Washington, D. C. U. S. Government Printing Office, 1953. Paper, 110 p. 35 cents. (Public Health Service Publication No. 276.)

Non-Government Publications

Obtain direct from the publishers Prices are indicated when known.

Admission Requirements of American Medical Colleges, 1957–58 (including Canada), by Helen Hofer Gee *and* E. Shepley Nourse. 2530 Ridge Avenue, Evanston, Ill., Association of American Medical Colleges, 1957. Paper, 223 p. $2.

College Teaching: A Psychologist's View, by Claude E. Buxton. New York 17, New York, Harcourt, Brace & Co., Inc., 1956. Cloth, 404 p. $4.95.

A practical guide to the art of college teaching designed for both the college teacher and the undergraduate or graduate student who aspires to teach in a college or university; deals with the various functions and activities of the college teacher.

An Educational History of the American People, by Adolphe E. Meyer. McGraw Hill Series in Education. New York, N. Y., McGraw Hill Book Co., Inc., 1957. Cloth, 444 p. $6.

Interweaves the educational and cultural development of the Nation; includes considerable material on higher education.

The Fund for the Advancement of Education, 1954–56. Report of the Ford Foundation. 655 Madison Avenue, New York 21, N. Y., The Fund for the Advancement of Education, 1957. Paper, 144 p.

Kentucky High School Graduates Who Went to College, 1956, by Robert R. Martin *and* James L. Miller, Jr., State Office Building, Frankfort. Kentucky Council of Public Higher Education, 1957. Paper, 11 p. Processed.

The Liberal Arts College: A Chapter in American Cultural History, by George P. Schmidt. New Brunswick, N. J., Rutgers University Press, 1957. Cloth, 310 p. $6.

A chronicle of the liberal arts college in America from the founding of Harvard to the present day, written by the professor of history at Douglass College of Rutgers University; writes of "the American college as sometimes somnolent, more often buoyant, busy with a hundred activities, but never quite forgetting the timeless values of the liberal arts."

Mental Health in College and University, by Dana L. Farnsworth. Cambridge, Mass., Harvard University Press, 1957. Cloth, 244 p. $5.

Designed to give an overall view of the field of mental health in college; written primarily for educators by the professor of hygiene and director of university health services, Harvard University. A concrete practical discussion that is of interest to parents of college students. Indicates the responsibility of the college for the mental health of its students and what it can do about this responsibility.

Racial Discrimination and Private Education: A Legal Analysis, by Arthur S. Miller. Chapel Hill, N. C., University of North Carolina Press, 1957. Cloth, 136 p. $3.50.

A study focused chiefly upon the legal ramifications involved in any attempt by a private school—primary, secondary, and collegiate—to commingle persons of different skin color in its student body.

Report of the Commission on the Teaching of Geography in Schools, by N. V. Scarfe, University of British Columbia, Vancouver, Canada. 5235 Ravenswood Avenue, Chicago 40. Denoyer-Geppert Co., 1957. Paper, 32 p. Printed.

Soldiers and Scholars: Military and National Policy, by John W. Masland *and* Laurence I. Radway. Princeton, N. J., Princeton University Press, 1957. Cloth, 530 p. $7.50.

Analyzes the military responsibility today, the growth of education for policy roles, the form and content of that education, and its relation to the overall duties of the Armed Forces; an extensive treatise covering all aspects of military education and many of its relationships.

Teacher Demand and Supply in Michigan 1954–1970. Ann Arbor, Mich., J. W. Edwards, Publisher, Inc., 1956. 138 p. $2.50.

A report by the Teacher Education Study Group, Higher Education Study, the Michigan Council of State College Presidents. This study deals generally with the problems faced by teacher education in the State-supported institutions of higher education in Michigan, but the major part deals with the characteristics, training, etc., of the present teachers in Michigan schools.

Teaching Typewriting Through Television, by William R. Pasework, Michigan State University, Bureau of Business Research, East Lansing, 1956. Paper, 61 p. (Research Report No. 17.)

They Went to College Early: Evaluation report number 2. New York, N. Y., The Fund for the Advancement of Education, 1957. 117 p.

Training of Specialists in International Relations, by C. Dale Fuller. Washington 6, D. C., American Council on Education, 1957. 136 p. $3.

An analysis of graduate training available to specialists in the field of international relations; sponsored jointly by the Carnegie Endowment for International Peace and the Social Science Foundation of the University of Denver. Describes and evaluates training programs, and presents suggestions for strengthening them. One of a series of studies in Universities and World Affairs.

Automation, Its Meaning for Educational Administration, by Walter A. Anderson *and* Others. University of Arkansas, Fayetteville, Ark. Bureau of Publications, Teachers College, Columbia University, New York, 1957. Paper, 56 p. $1.50.

The College Handbook, 1957–58. S. Donald Karl, and Barbara L. Diehl, *eds.* College Entrance Examination Board, 425 West 117th Street, New York 27. C/o Educational Testing Service, Box 592, Princeton, N. J., or Box 27896, Los Angeles 27, Calif. Paper, 456 p. $1.50.

College Teachers and College Teachings, by Walter Crosby Eells. Washington, D. C. Southern Regional Education Board, 881 Peachtree St. NE., Atlanta 9, Ga., 1957. Paper, 282 p.

An Annotated Bibliography on College and University Faculty Members and Instructional Methods.

Foreign Language Teaching in Illinois. Allerton House Conference on Education report of the foreign language study group, 1957. 204 Gregory Hall, University of Illinois, Urbana, Ill. Paper, 76 p. Free.

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Language: An Enquiry Into its Meaning and Function. Science of Culture Series, Volume VIII. Planned and edited by Ruth Nanda Anshen. Harper & Bros., 49 East 33d Street, New York 16, 1957. Cloth, 366 p. $6.

The Student-Physician, Introductory Studies in the Sociology of Medical Education. Robert K. Merton, George Reader, M. D., *and* Patricia L. Kendall, *editors*. The Commonwealth Fund, Harvard University Press, Cambridge, Mass., 1957. Cloth, 355 p. $5.

Two Surveys: "This Is Where New England Students Go to College," "These Are New England's Colleges and Universities," by Robert H. Kroepsch. 31 Church Street, Winchester, Mass. New England Board of Higher Education, 1957. Paper, 29 p.

William R. Davie, by Blackwell P. Robinson. Chapel Hill, N. C., University of North Carolina Press, 1957. Cloth, 495 p. $6.

The life of a soldier and statesman, the Father of the University of North Carolina—the man chiefly responsible for its establishment, location, building, and endowment, for selecting its faculty and planning its curriculum.

No Frontier to Learning: The Mexican Student in the United States, by Ralph L. Beals *and* Norman D. Humphrey. Minneapolis, Minn., University of Minnesota Press, 1957. 148 p. $3.25.

The Role of the School in the Atlantic Community. Distributed by American Council on NATO, Inc., 22 East 67th Street, New York 21, N. Y. Paper, 45 p.

Segregation and Desegregation: A digest of recent research, by Melvin M. Tumin. New York 22, N. Y., Anti-Defamation League B'nai B'rith, 1957. Paper, 112 p.

They Went to College Early: Evaluation Report Number 2. New York 21, N. Y., The Fund for the Advancement of Education, 1957. Paper, 117 p.

Thirteenth Annual Utah Conference on Higher Education, Brigham Young University, Provo, Utah, September 13–15, 1956. 223 State Capitol Building, Salt Lake City, Utah. Processed, 168 p.

Using Library Resources in Educational Research, by Ruth E. Seeger. Columbus, Ohio, Ohio State University Press, 1957. Paper, 26 p. 75 cents. Discounts for quantity orders.

Vital Issues in Education, A Report of the Twenty-first Educational Conference, New York City, November 1–2, 1956, held under the auspices of the Educational Records Bureau and the American Council on Education, Arthur E. Traxler (*ed.*). Washington, D. C., American Council on Education, 1957. Paper, 176 p. $2.

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